

Periodic Phenomena Worksheet 6.2 p326

Characteristics of a Sine Function

Periodic Function - a function whose values are repeated at equal intervals of the independent variable

Apr 19-8:14 AM

David's Solution

Cycle of the Proportion of the Moon Visible

I drew a scatter plot with Day of year as the independent variable and Proportion of Moon visible as the dependent variable. Then I interpreted the pattern.

- 1 This graph has a repeating pattern. Its period is 30 days. I can tell because the proportion returns to 0 at 30 days, and the next part of the curve looks the same as the previous part.
- 2 I used the repeating pattern to extend the graph to 150 days.
- 3 I used the graph to estimate the proportion of the Moon visible on day 130.

Nov 12-7:39 AM

6. This is a graph of Nali's height above the ground in terms of time while riding a Ferris wheel.

a) 8s period
b) Time it takes to reach the same height again.
c) $\text{max} = 7$
 $\text{min} = 1$
 $7 - 1 = 6\text{m}$
d) at 10sec $\rightarrow 4\text{m}$
e) 4s, 12s, 20s... 28s extrapolation
f) 2s, 6s, 10s, 14s, 18s, 22s

Nov 15-9:06 AM

P 330 -333

q.1, 4, 5,7, 9 & 10

Apr 23-2:28 PM

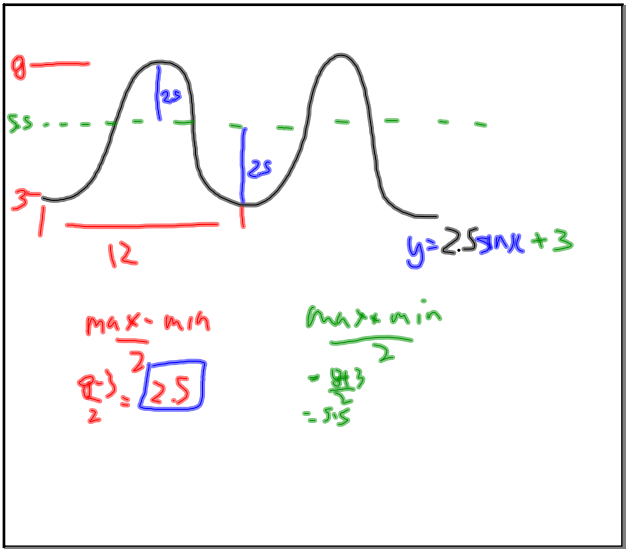
Other Examples

axis of symmetry = 3
amplitude = 4
cycle = 6 sec

Apr 19-10:09 AM

$P = 6$
 $A = 4$
Axis = 3

Apr 23-2:07 PM



Nov 19-10:06 AM